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(54) **Computer-aided techniques for analyzing biological sequences**

(57) Computer-aided techniques for analyzing biological sequences like nucleic acids are provided. The computer system may analyze hybridization intensities indicating hybridization affinity between mucleic acid probes and a sample nucleic acid sequence in order to call bases in the sample sequence. Multiple base calls may be combined to form a single base call. Additionally, the computer system may analyze hybridization intensities in order to monitor gene expression or the change in gene expression as compared to a baseline.

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